which occurs during true senile involution. Senile form of disease is one of a process that is essentially diffuse and, perhaps, involves the extra vascular tissues simultaneously with the vascular apparatus, while the pre-senile form, or pathologic arterio-sclerosis, is, in the beginning, a disease of the blood-vessels alone. Rapid degenerative changes in the organs, possibly due to restricted involvement of vessels and the character of lesions, are more characteristic of the pre-senile than the senile type. Later stages of senile form, and to less extent with pre-senile type, patients' color would suggest cachexia or high-grade anemia. Blood examination in these cases shows no commensurate reduction in number of corpuscles or of the coloring matter. Pallid appearance, thought to be due to the contracted vascular channels. Marked fluctuation in quantity and variability of specific gravity of urine quite noticeable. Paroxysmal sweating a symptom in many cases during earlier stages of disease. Author's observations as to blood pressure have shown comparatively high diastolic pressure, thus during the earlier period there is a peculiar prolongation of the first heart sound. J. E. CLARK (New York).

MENTAL SYMPTOMS ASSOCIATED WITH PERNICIOUS ANEMIA. William Pickett (The American Journal of the Medical Sciences, June, 1904).

From an examination of seven cases of paresis the author draws the conclusion that when the spinal cord bears the brunt of the disease process a simple anemia with leucocytosis is found; when mental symptoms alone appear the blood state is not characteristic, and from this it appears that perhaps anemias, or the toxins of anemias, are a factor in the cord lesions even of paresis. Abstracts of five cases of pernicious anemia are given, and a composite picture of the mental disturbance in these cases presents a shallow confusion with impairment of the ideas of time and place, more marked on awakening from sleep. The patient fabricates, relating experiences of "yesterday" in a circumstantial manner. Illusions, particularly of identity, are common. Hallucinations of any of the senses appear at times. Persecutory delusions may arise. They are usually transient, causing episodes of fear and agitation, but they may persist for considerable periods. Korsakoff's disease and *folie Brightique* resemble it closely. C. D. CAMP (Philadelphia).

TABES DORSALIS AND ITS RELATION TO SYPHILIS. Lesser (Berl. klin. Woch.., Jan. 25, 1904).

The author discusses the connection between locomotor ataxia and syphilis, chiefly from the pathological side of the question, and attempts to bring further proof from the post-mortem room that tabes is a syphilitic affection. In the first place, in answer to the question, How many persons who have had tabes show post-mortem signs of undoubted syphilis, and how many persons who have died over 35 years of age show signs of undoubted syphilis post-mortem? he found that 28 per cent. of the tabes cases had post-mortem signs, while of all persons who died over the age of 35 only 9.5 per cent. showed syphilitic signs. He realizes that a number of cases of former syphilis will not leave any signs behind, but it is clear that tabes and syphilis stand in a causal relationship together, at all events in some cases. The next question which he sets himself to answer is: Is the tabes to be regarded as a direct syphilitic affection in those cases in which the connection can be ascertained? In order to reply to this question, he finds it necessary to go fully into the pathology of syphilitic lesions. The changes may be best divided into: (1) Simple hyperplastic growths, having the characters of inflammation, and which leave no anatomical changes behind; and (2) gummatous growths. One must recognize infiltrating papular inflammations and proliferating interstitial inflammations. He therefore classifies syphilitic lesions into the following: (1) Papular inflammations, being equivalent to secondary syphilitic lesions and affecting the skin chiefly; (2) gummatous inflammations, being equivalent to tertiary manifestations, and may affect any part of the body; and (3) interstitial inflammations, which he calls quartary manifestations, and which only affect the internal organs. The first class reacts to mercury, the second to iodide of potassium, and the third is refractory towards both. As examples of interstitial changes, he quotes fibrous orchitis and syphilitic fibrosis of the liver. While the secondary changes end in absorption, the quartary changes are irreparable. After discussing the histological changes in these manifestations, he passes on to consider the changes found in tabes, and divides these into, first, parenchymatous degeneration of the nervous elements of the posterior columns of the spinal cords; and secondly, overgrowth of the interstitial tissue of the cord, the so-called neuroglia. The rest of the histological changes are not constant, and are, therefore, of minor importance. In deciding which of the two are primary, he argues by analogy that the interstitial changes are primary. He points out that in cirrhosis of the liver the cell degeneration is always regarded as secondary; so in chronic interstitial nephritis and in atrophia lævis of the tongue. He therefore argues that tabes is a quartary manifestation of syphilis. He next meets each of the arguments raised against the suggestion that tabes is a syphilitic affection. That it does not react to mercury or iodide of potassium is explained, since none of the quartary manifestations do. The second objection is that in the majority of tabes cases there are no traces of other co-existing syphilitic lesions of the skin or internal organs, and conversely, in the severer cases of syphilis tabes dorsalis very rarely is found. In reply to this, he regards the manifestations of syphilis as being due to a micro-organism, the virulence of which appears to diminish in the course of time. While the virulence is great, the lesions caused are of the nature of secondary manifestations, and only when this has become much attenuated are quartary changes produced. Thus it is not likely when interstitial changes are found that gummatous or simple inflammatory changes will also be present. The third objection is that the extraordinary frequency of syphilis, when compared with the rarity of tabes speaks against a connection between the two diseases. He points out that all the late manifestations of syphilis are rare, and if one compares the number of syphilitics who suffer from a gummatous affection of the elbow-joint one will find that the percentage is still less than in the case of tabes. The fourth objection is that sufferers from tabes can infect themselves with syphilis. That a want of immunity cannot be taken as proof against the previous existence of syphilis is shown by the fact that syphilitics with tertiary manifestations at times have acquired fresh syphilis. The last objection is that tabes is a system disease, and that these diseases cannot be syphilitic. According to Lesser, the characteristic of interstitial syphilitic changes is that they have a predilection for certain localizations, and that nowhere is this more clearly shown than in syphilitic fibrosis of the liver. In conclusion, he remarks on the coincidence of tabes and aneurysm. He finds that every fifth patient suffering from tabes dorsalis shows signs of aneurysm. From its histological characters, it appears that the majority of aneurysms are interstitial syphilitic manifestations, and this he considers is evidence in favor of his views. JELLIFFE.

EXOPHTHALMIC GOITER SUCCESSFULLY TREATED WITH ANTITHYROIDIN.

Möebius's favorable results from the employment of antithyroid serum in exophthalmic goiter induced Dr. Josionek, of Mildenau-Wiesenbad, to try the serum in two typical cases of the disease. Both patients showed the characteristic symptomatic trinity: exophthalmos, tachycardia, and